Residential Working Group Minutes

Facilitator: Margaret Smigo, DEQ

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Note-taker: Warren Smigo

Group Members in Attendance: Grace LeRose (City of Richmond), Scott Burger (Sierra Club), John Newton (Henrico Co.), Bill Shanabruch (Reedy Creek Coalition), David Bernard (Sierra Club/Coastal Currents)

1. **Sign in / Introductions**

2. **Review of Work Group purpose and responsibilities**

    a. Group understands their only responsibilities are to attend meetings and actively participate during meetings. Meeting minutes (drafted and circulated by the facilitator) will be made available to the Steering Committee meeting to help them chose residential BMPs to include in the Implementation Plan.

    b. Group discussed the "Standard Toolbox" and "Outside the Box" corrective actions and question was asked, "Which BMPs are meant for the residential group (is there a list for just residential)? The group then had a discussion that yes, there are certain BMPs which citizens can initiate on their own (i.e. rain gardens being most common and educating homeowners about picking up after their pets). Also, some residents have a community or homeowners association where rain gardens and larger scale pet pick-up education/signage could be made into a project. Finally, there is expected to be some overlap between residential workgroup suggested BMPs with government / urban workgroup for larger projects such as bioretention basins, vegetated swales, porous pavement / pavers, cisterns, (etc) as implementation will require a coordinated effort.

3. **Work Group Brainstorming Questions:** Note - Facilitator read each of the bulleted questions and asked members to take ~5 minutes to write down a few ideas for each one. Then as a group discussed ideas for each question.

    - **Which residential BMPs deserve consideration based on your knowledge of these impaired watersheds?**

        - Pet waste-pickup program – community / neighborhood associations to sponsor

        - Septic repair program and education program for homeowners

- Stormwater BMPs – including any and all types in the CSO watersheds to reduce the frequency of CSOs. Would like to see more green infrastructure used (less "big" infrastructure projects such as storage which doesn't really address the issue of stormwater runoff). Group member mentioned we need to see stormwater BMPs on residential property.

- Education program for citizens with irrigation system to include proper use. Group member indicated that irrigation practices should be regulated given the water quantity and quality issues. Group discussed the potential of education citizens who irrigate about how they may use drip irrigation from rain barrels in order to reduce stormwater runoff, reduce water bills / reduce water usage.

- **Which BMPs, in your opinion, would achieve the most success in terms of community buy-in and successful reduction of bacteria in the waterways?** Note - For this question we not only listed ideas but placed them into prioritized groups with "I" being the first group implemented and "III" being the last.

  BMPs – Priority I

  - Rain barrels – inexpensive and will save citizens $$ on water bill
  - Initiation of Pet waste clean-up program – at citizen, community association, and locality levels
  - Repair Septic failures / Sewer line leaks – requires a proactive inspection process involving the locality, VDH, and sewer authority (and possibly others)
  - Initiate building code changes in order for green infrastructure and LEED development / projects to move forward. Currently restrictions in building code in some areas prevent certain BMPs (i.e. green roofs) from being installed.
  - Tree planting – promotes runoff absorption and beautification, increases property values, easy to get citizen buy-in, etc.

  BMPs – Priority II

  - Rain gardens

- Homeowner education on responsibilities regarding their sewer connections (what can and cannot go down drain, also stormwater drains, report sewer leaks/issues, etc.)

- Emulate the "green alley" programs which have been initiated in other cities (i.e. Chicago)

BMPs – Priority III

- Increased enforcement for failed septics and sewer leaks. Also should create a reward program or incentives for proper maintenance, upgrades on treatment (i.e. nutrient removal installed with septic system), etc.

- Install more "green pavers" in municipal areas. Group Member question – How did Cheswick Park in Henrico go about getting green pavers installed? Might their efforts be duplicated in order to get them installed elsewhere?

- Create a reward program for city residents and neighborhoods to promote competition for BMPs to promote water quality / quantity issues (i.e. Reward for "greenest" properties/communities).

- **Which BMPs do you think would be too difficult to implement and why (cost, lack of buy-in, maintenance, etc)?** Note – group members limited this discussion mostly to those BMPs previously discussed.

  - Regulation of irrigation practices

  - Green roofs (retrofits are especially expensive)

  - Green alleys (Member mentioned the extensive costs of current green alley pilot project by City)

- **Can you think of any BMPs which should be considered because they would be particularly useful in a particular impaired watershed but aren't on the list?**

  - Cisterns – Group members discussed there are code issues regarding grey-water which limit effectiveness of cisterns. VDH should be consulted regarding this issue. Was agreed that cisterns would offer multiple benefits especially in CSO watersheds.

- Bring VA's "green restaurant" program to a local level. Education for local restaurant owners on water quality issues to promote not only proper grease disposal but also recycling

- Pet waste collection for use in bio-energy generation

- **How can we gain community buy-in with IP effort? What is the best way to connect with citizens of these impaired waterways in order to achieve positive change?** Note – in the interest of time, these two questions were discussed together.

  - Suggest BMPs that improve community beautification as these will increase property values and tend to be a no-brainer for folks to support (i.e. – tree planting, pet waste clean-up stations)

  - Promote the issues of impaired waterways by linking with citizen usage of nearby parks – improving water quality improves human health

  - BMPs need to offer some incentive to excite citizens. An example would be (in City of Richmond) stormwater fee reductions for implementing BMPs on property. Incentives must be advertised.

  - Regulators (DEQ, EPA, DCR, VDH) should show more support of "regulatees" in their efforts to implement BMPs. Also, neighboring localities should be supportive of other localities' efforts. One member brought up that City of Richmond has been proactive by initiating a "Stormwater Fee" in conjunction with their stormwater program which made runoff from personal property a prominent issue for citizens to consider. Very little support has been offered by state regulators or neighboring localities regarding the City's stormwater fee. Communication between localities and regulators in addition to public approval of one another's efforts to improve water quality and quantity could boost citizen buy-in and encourage other localities to be more proactive.

  - Promote citizen monitoring program of nearby waters. Allows citizens to learn as well as feel a sense of ownership for their local waterway.

- **Ideas for future work group meetings (must be handicap accessible and free)?**

  - Recommendations included the City of Richmond WWTP and Henrico County Administration Building. Previous suggestion included a church in Forest Hill area.

4. **Next Residential WG meeting/location:** Monday December 13th at 3:30pm at the City of Richmond Waste Water Treatment Plant located at 1400 Brander St., Richmond, VA

For Your Information

Septic systems more prevalent in de-listed mainstem segments of the James watershed (approx. Bernards Creek to just above City).

Table 1. Residential control measure costs. If you do not see certain BMP types below – it's because we don't have estimates for them.

Residential and Urban Control Measure	Unit	Cost per Unit
Septic Systems Pump-outs (RB-1)	System	$220
Septic System Repair (RB-3)	System	$3,500
Septic System Installation/Replacement (RB-4)	System	$4,000
Alternative Waste Treatment System Installation (RB-5)	System	$15,000
Pet Waste Education Program	System	$3,750
Pet Waste Composters	Composters	$50